U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

| STA | TEMENT UNDER 37 CFR 3.73(b) | |
|---|--|---|
| Applicant/Patent Owner: Hyun-Wook KIM et al. | | |
| Application No./Patent No.: 10/585,403 | Filed/Issue Date: | January 19, 2007 |
| Titled: System for Packet Data Service in the Synchronous Communication Networ | • | Communication Network and |
| SK TELECOM CO., LTD. | _{, a} Corporation | |
| (Name of Assignee) | (Type of Assignee, e.g., corporatio | on, partnership, university, government agency, etc. |
| states that it is: | | |
| 1. X the assignee of the entire right, title, and | d interest in; | |
| 2. an assignee of less than the entire right (The extent (by percentage) of its owner.) | , title, and interest in rship interest is %); or | |
| 3. the assignee of an undivided interest in | the entirety of (a complete assignment | from one of the joint inventors was made) |
| the patent application/patent identified above, by vii | rtue of either: | |
| A. An assignment from the inventor(s) of the United States Patent and Trademark copy therefore is attached. | ne patent application/patent identified al k Office at Reel <u>018836</u> , F | bove. The assignment was recorded in rame 0321 , or for which a |
| OR | | |
| B. A chain of title from the inventor(s), of the | ne patent application/patent identified at | bove, to the current assignee as follows: |
| 1. From: | To: | |
| | in the United States Patent and Tradem | |
| Reel | , Frame, or f | for which a copy thereof is attached. |
| 2. From: | To: | |
| The document was recorded | in the United States Patent and Tradem | |
| Reel | , Frame, or f | for which a copy thereof is attached. |
| 3. From: | To: | |
| The document was recorded | in the United States Patent and Tradem | |
| Reel | , Frame, or f | for which a copy thereof is attached. |
| Additional documents in the chain of tit | le are listed on a supplemental sheet(s |). |
| As required by 37 CFR 3.73(b)(1)(i), the do- or concurrently is being, submitted for record | | e from the original owner to the assignee was, |
| [NOTE: A separate copy (i.e., a true copy or accordance with 37 CFR Part 3, to record the | | must be submitted to Assignment Division in PTO. <u>See</u> MPEP 302.08] |
| The undersigned (whose title is supplied below) is a | authorized to act on behalf of the assigr | nee. |
| / Yoon S. Ham/ | | 09/28/2009 |
| Signature | | Date |
| Yoon S. Ham | | Attorney of Record |
| Printed or Typed Name | | Title |

This collection of information is required by 37 CFR 3.73(b). The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11 and 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. **SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.**

| | Application No. | Applicant(s) |
|---|---|--|
| + | 09/975,054 | |
| Office Action Summary | | MATSUDA, EISHI |
| , | Examiner | Art Unit |
| The MAILING DATE of this communic | Terry D. Cunningham | 2816 |
| Period for Reply | success of the cover shock w | un une correspondence dadress |
| A SHORTENED STATUTORY PERIOD FO THE MAILING DATE OF THIS COMMUNIC - Extensions of time may be available under the provisions o after SIX (6) MONTHS from the mailing date of this commu - If the period for reply specified above is less than thirty (30) - If NO period for reply is specified above, the maximum stat - Failure to reply within the set or extended period for reply w - Any reply received by the Office later than three months aft earned patent term adjustment. See 37 CFR 1.704(b). Status | CATION. of 37 CFR 1.136(a). In no event, however, may a runication. of days, a reply within the statutory minimum of thirutory period will apply and will expire SIX (6) MON will, by statute, cause the application to become AE | reply be timely filed ty (30) days will be considered timely. JTHS from the mailing date of this communication. BANDONED (35 U.S.C. § 133). |
| 1) Responsive to communication(s) file | ed on | |
| 2a) This action is FINAL. 2 | b)⊠ This action is non-final. | |
| 3) Since this application is in condition closed in accordance with the practic Disposition of Claims | | |
| 4)⊠ Claim(s) <u>1-10</u> is/are pending in the a | pplication. | |
| 4a) Of the above claim(s) is/are | | - |
| 5) Claim(s) is/are allowed. | | |
| 6)⊠ Claim(s) <u>1-10</u> is/are rejected. | | |
| 7)☐ Claim(s) is/are objected to. | | |
| 8) Claim(s) are subject to restricti | ion and/or election requirement | |
| Application Papers | | |
| 9) The specification is objected to by the | Examiner. | |
| 10)⊠ The drawing(s) filed on <u>12 October 20</u> | <u>01</u> is/are: a)⊠ accepted or b)⊡ obje | cted to by the Examiner. |
| Applicant may not request that any obje | ction to the drawing(s) be held in abeya | ance. See 37 CFR 1.85(a). |
| 11) The proposed drawing correction filed | on is: a) approved b) d | isapproved by the Examiner. |
| lf approved, corrected drawings are requ | uired in reply to this Office action. | |
| 12)☐ The oath or declaration is objected to I | by the Examiner. | |
| Priority under 35 U.S.C. §§ 119 and 120 | | |
| 13)⊠ Acknowledgment is made of a claim f | or foreign priority under 35 U.S.C. | § 119(a)-(d) or (f). |
| a)□ All b)□ Some * c)⊠ None of: | | |
| 1.⊠ Certified copies of the priority d | ocuments have been received. | |
| 2.☐ Certified copies of the priority d | ocuments have been received in A | pplication No |
| 3. Copies of the certified copies of application from the Interna * See the attached detailed Office action | f the priority documents have been tional Bureau (PCT Rule 17.2(a)). for a list of the certified copies not | , |
| 14)☐ Acknowledgment is made of a claim for | r domestic priority under 35 U.S.C. | § 119(e) (to a provisional application). |
| a) ☐ The translation of the foreign lang 15)☐ Acknowledgment is made of a claim fo | | |
| Attachment(s) | | |
| 1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-3) Information Disclosure Statement(s) (PTO-1449) Page | O-948) 5) Notice of I | Summary (PTO-413) Paper No(s) nformal Patent Application (PTO-152) |
| U.S. Patent and Trademark Office PTO-326 (Rev. 04-01) | Office Action Summary | Part of Paper No. 3 |



Art Unit: 2816

DETAILED ACTION

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 1-10 are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

The specification fails to adequately disclose how to make and use the claimed circuit. The specification only discloses blank boxes for each of the elements 11-15. Further, the specification fails to adequately describe the operation of each of the disclosed elements. If elements having the broad text meanings were known in the art to have well known specific construction, then blank box only description is acceptable. However, since this is not the case, it is not seen that the invention is enabled. As an example, the figures show element 11 having the text label CONVERTER CIRCUIT, which is only describe as having the operation converting a DC voltage to a DC voltage. However, the specification in no way states the type or value of the output voltage of the converter. Since the specification fails to disclose any specifics concerning how to make and use the boxes shown in the figures, it is not seen that the specification adequately enables the specification.

Claims 1-10 are rejected under 35 U.S.C. § 112, first paragraph, as based on a disclosure which is not enabling. With respect to claims 1-3, the "second differentiating circuit", the

Application/Control Number: 09/975,054

Art Unit: 2816

"current injecting circuit" and the connection of the output of the "absorbing circuits" to the output of the "converter circuit" are deemed critical or essential to the practice of the invention, but is not included in the claim(s). With respect to claims 4-6, the "first differentiating circuit", the "current absorbing circuit" and the connection of the output of the "absorbing circuits" to the output of the "converter circuit" are deemed critical or essential to the practice of the invention, but is not included in the claim(s). With respect to claims 7-10, the connection of the output of the "absorbing circuits" to the output of the "converter circuit" are deemed critical or essential to the practice of the invention, but is not included in the claim(s). An arrangement lacking this feature is not enabled by the disclosure since it cannot be understood from the specification how the circuit will operate without such. *In re Mayhew*, 527 F.2d 1229, 188 USPQ 356 (CCPA 1976).

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-10 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claims 1-10, it is not understood how the circuit can provide the claimed operation without the above discussed lacking "critical features".

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public

Art Unit: 2816

use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-10 are rejected under 35 U.S.C. §102(b) as being anticipated by Doluca et al. (USPN 4,769,784). Doluca et al. discloses, in Figs. 2-3, a circuit comprising: "a converter circuit (Fig. 3)"; "a first differentiating circuit (39 and 43)"; "a current absorbing circuit (45)"; "a second differentiating circuit (31 and 35)"; and "a current injecting circuit (37)", all connected and operating similarly as recited by Applicant.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Terry Cunningham whose telephone number is 703-308-4872. The examiner can normally be reached on Monday-Thursday from 7:30 to 6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Timothy P. Callahan can be reached on 703-308-4876. The fax phone numbers for Technology Center 2800 are 703-872-9318 for Before Final communications and 703-872-9319 for After Final communications. Please note, any faxed paper clearly stating **DRAFT** or **PROPOSED AMENDMENT** at the top will be forwarded directly to the Examiner. All others will be treated as a formal response and acted upon accordingly.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is 703-308-0956.

TC

December 6, 2002

Terry D. Cunningha Primary Examiner

Art Unit 2816